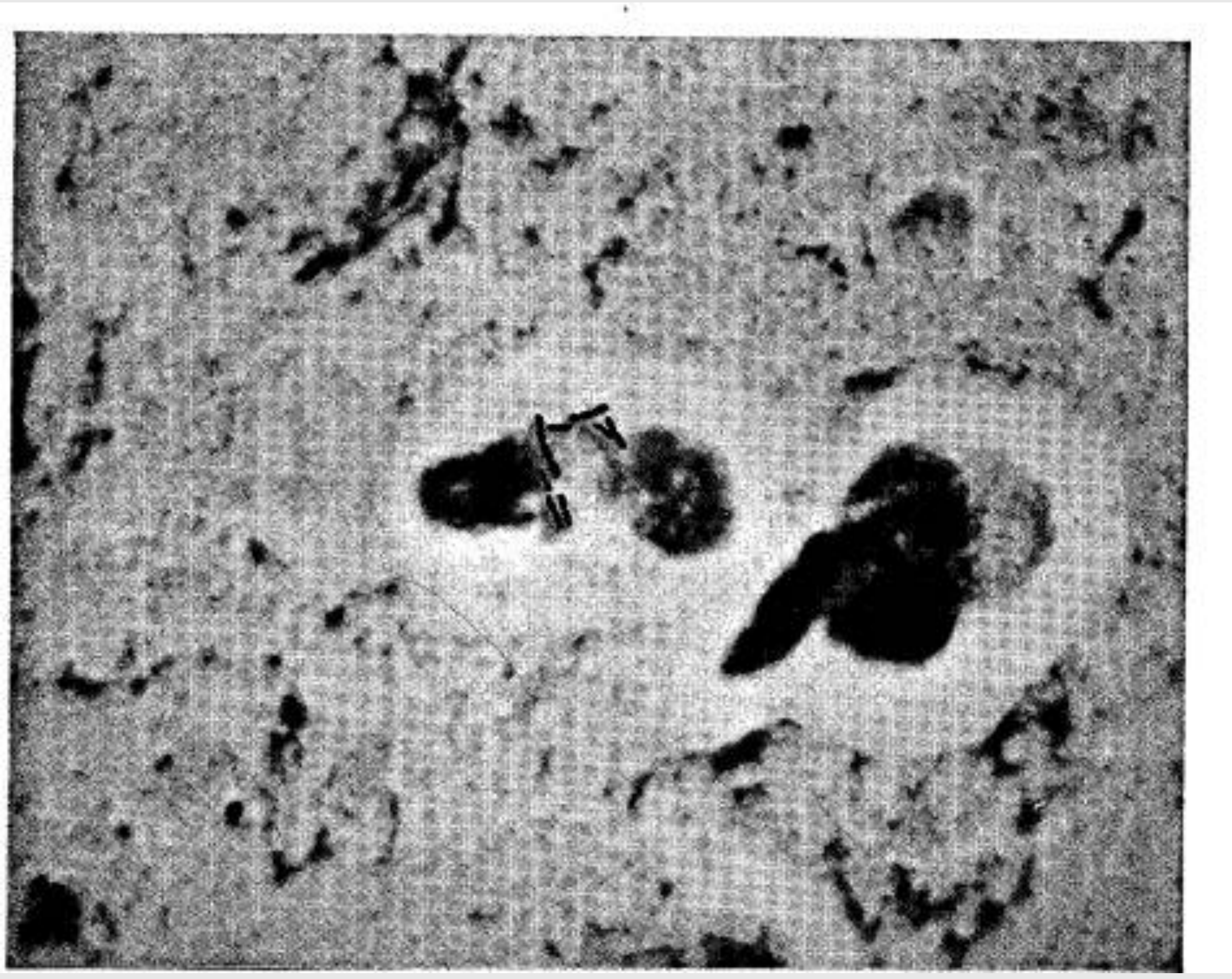
- **Publications 1912-1939**
- The Koch Treatment of Cancer, by Dr. C. E. Field, M.D.,1925
- The Koch Chemical Formula in the Treatment of Cancer, by Dr. C. E. Field, M.D.,1925
- Is a Cure for Cancer Possible by Antitoxin And Serum Treatment, by Dr. C. E. Field, M.D.,1925
- Can Cancer Be Successfully Treated By Non-Surgical Methods? by Dr. Fred Dugdale, M.D., 1926
- The Cancer Situation, by Dr. Elnora C. Folkmar, M.D.,1926
- CANCER-Its Cause and Prevention, by Dr. Elnora C. Folkmar, M. Ph., D.S.S., M.D., 1926
- The Perodic Medical Examination and The Early Diagnosis of Cancer, by Dr. Elnora C. Folkmar, M.Ph., D.S.S., M.D., 1929
- Cancer, by Dr. D. W. Dewey, M.D., 1933
- The Koch Cook Book, by Olga C. Compere, 1935
- Dr. Willard H Dow, Along With Other Scientists, Speak Out on Koch Reagents, 1936-1947
- Acquired Immunity to Tuberculosis, by Gerrit J. Warnshuis, M.D., 1937
- The Use of Peroxide... in the Treatment of Anergy and Hyperergy, Dr. H. Maisin, M.D., 1938
- Neoplasms, Infections, and Allergy, Dr. H. Maisin, M.D., 1938
- Reversing the Pathological Trend of Rheumatic Fever and Coronary Thrombosis, Dr. D. H. Arnott, MD., 1938
- Phagocytosis of the Tubercle Bacillus
- **Publications 1940-1959**

PHAGOCYTOSIS OF THE TUBERCLE BACILLUS

Chromomicrophotographs from the sputum of tuberculosis patients undergoing recovery from the cancer antitoxin treatment.

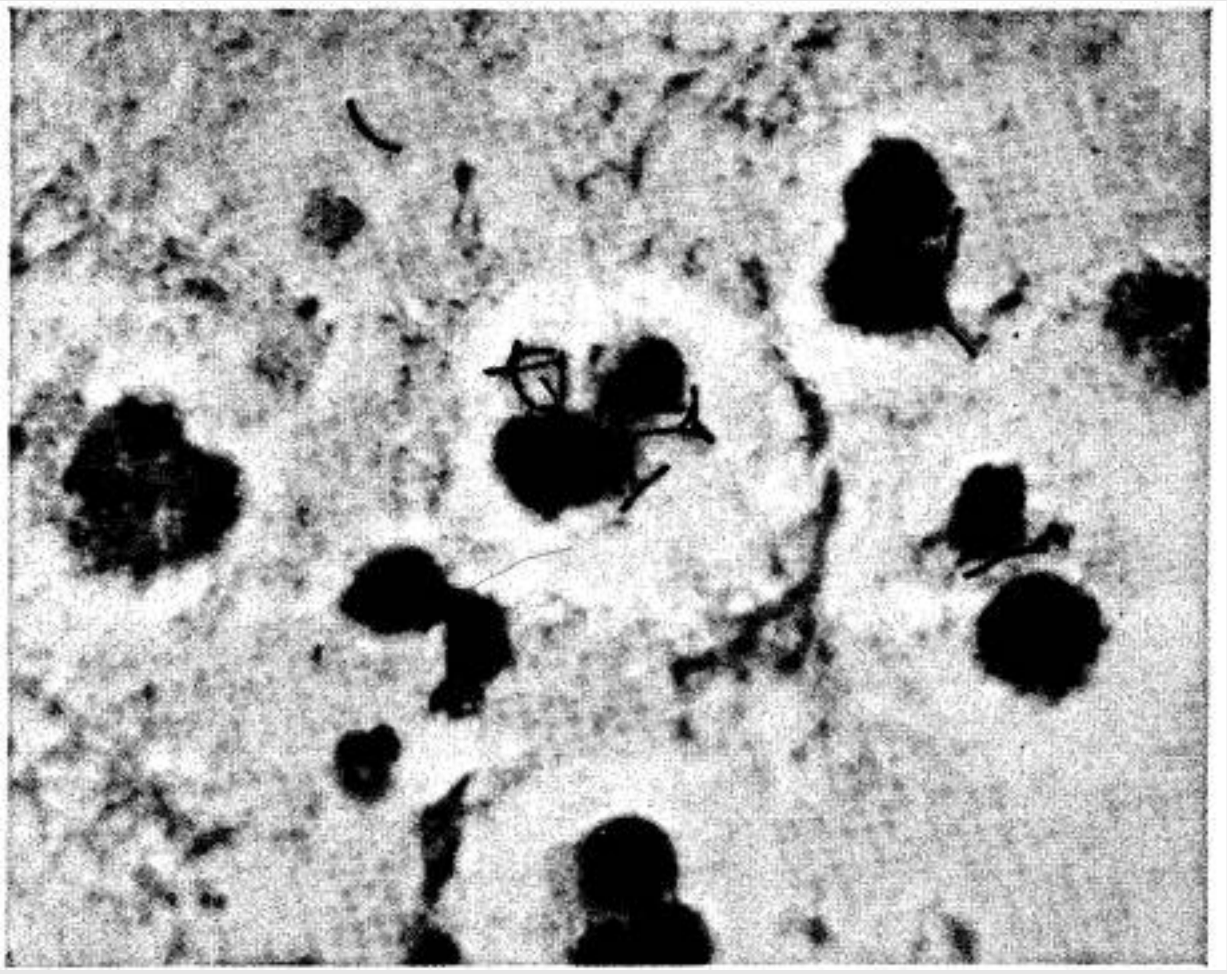


The tubercle bacilli are stained red, and are found within the bodies of the white cells shown to take a pale stain. The irregular shaped darker blue stained bodies within the white cell bodies are the nuclei of these cells.

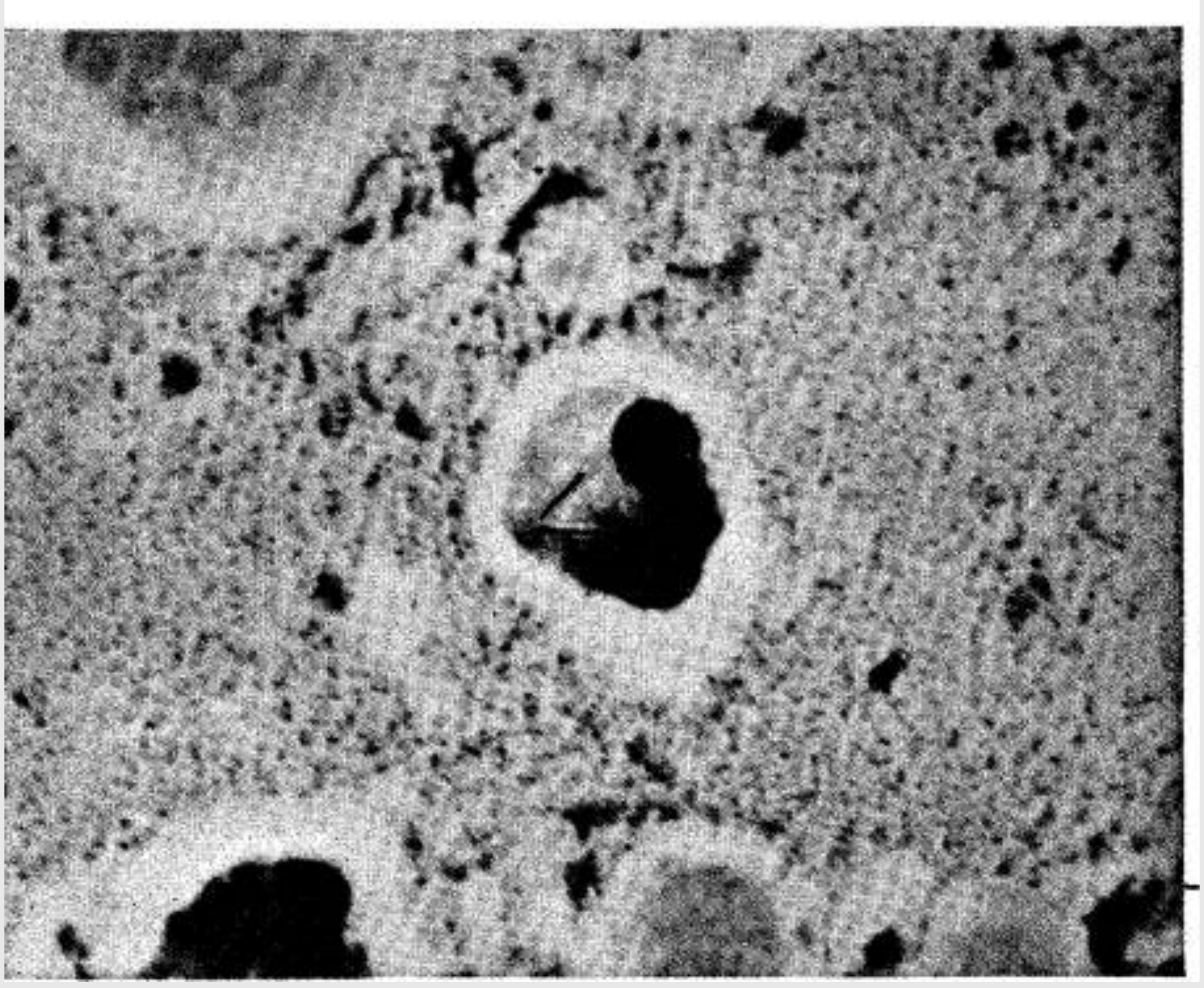
The sputum of tuberculosis patients so far as I have been able to learn has never been found to exhibit tubercle bacilli taken up by the white cells of the blood and tissues, except in those who have taken the cancer antitoxin for the cure of their tuberculosis. Several interpretations could be given this finding all of which portray various features of the recovery mechanism. If we are to understand by it that the germs are dead or so devitalized that they can be arrested and destroyed by the policemen of the blood—the white cells, then it indicates that the germs can no longer live in the body after treatment and exist as just so much debris that is to be removed. It might also mean that the tubercles and cavities are being cleaned out so that healing of tissue can take place on a healthy basis with normal lung replacement, rather than by the walling off and reserving of the diseased areas for future trouble. This seems to be a fact, for the X-ray pictures of the lungs some months after recovery show no disease markings whatever, even though extensive changes were recorded before treatment. In fact the radiographic evidence after recovery shows that tuberculosis never existed, so complete is the recovery.

Another interpretation of the phagocytosis of the bacilli is that the white cells have improved in the dispersion of their colloidal makeup so that the surface tension is lowered and the germs are thus freely engulfed. Should this be so, the electric charges carried by the colloidal particles must have greatly increased and their higher potential than that of the bacilli must result in electrocution of the latter for disease germs can only live in tissues whose electric potential is as low as their own.

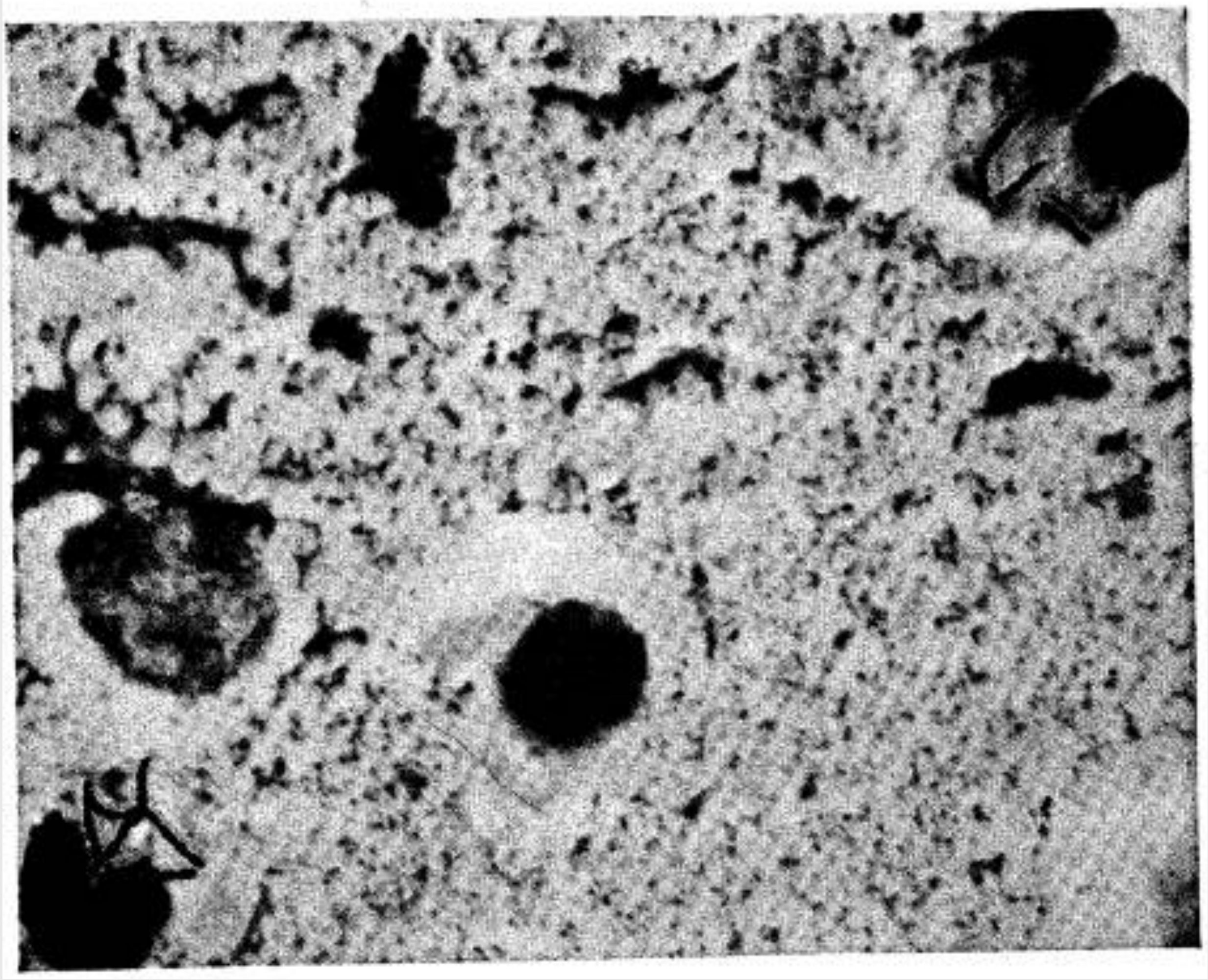
Phagocytosis here pictured is so frequently found some time or another in our recoveries from tuberculosis that it is an important new event, and the fragmentation and dissolution shown in the germs points to their destruction and a victory for the body tissues.



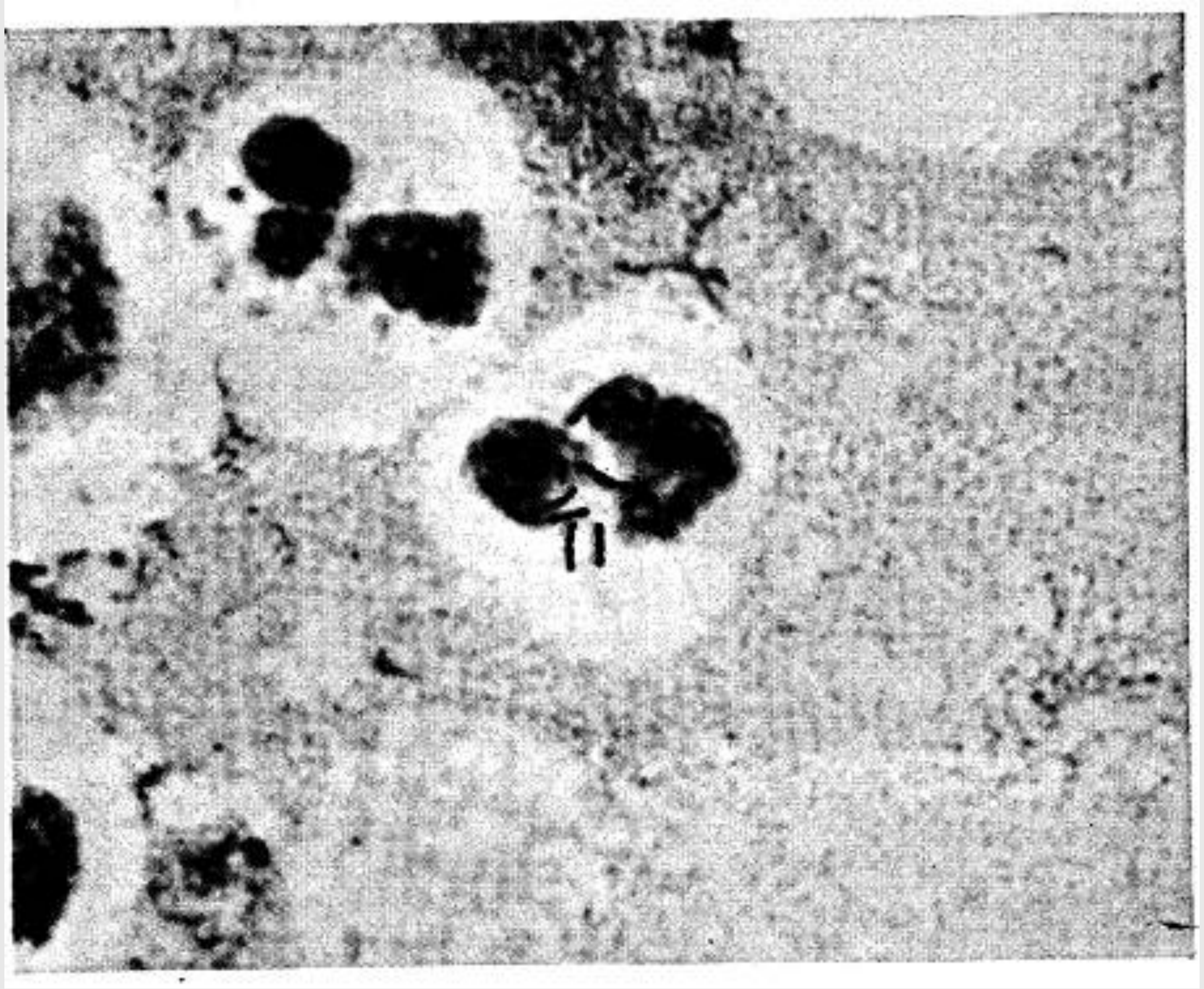
Germs showing fragmentation within the cells.



The germs here shown are being dissolved by the white cell.



Digestion of the bacilli within the white cells.



The bacilli here are undergoing fragmentation and destruction.